CLAIMS

1. (Original) A conjugate molecule comprising the *E. coli* O157 O-specific polysaccharide, covalently bound to a carrier selected from the group consisting of: the B subunit of Shiga toxin 1, the B subunit of Shiga toxin 2, a non-toxic mutant Shiga toxin 1 holotoxin, and a non-toxic mutant Shiga toxin 2 holotoxin.

2. (Original) The conjugate molecule of claim 1 wherein the *E. coli* O157 O-specific polysaccharide is covalently hound to the B subunit of Shiga toxin 1 by means of a dicarboxylic acid dihydrazide linker.

3. (Original) The conjugate molecule of claim 2 wherein the dicarboxylic acid dihydrazide is adipic acid dihydrazide.

4. (Cancelled)

5. (Cancelled)

6. (Currently Amended) A pharmaceutical composition comprising a therapeutically effective amount of the conjugate molecule of any one of claims [1-5] 1-3, further comprising a pharmaceutically acceptable carrier.

7. (Original) The pharmaceutical composition of claim 6, further comprising an adjuvant.

8. (Original) The pharmaceutical composition of claim 6, wherein the composition is capable, upon injection into a mouse of an amount of said composition ~~containing~~ comprising 2.5 μg of *E. coli* O157 O-specific polysaccharide, of inducing in the serum of said mouse antibodies which neutralize the toxicity of Stxl toward HeLa cells.

9. (Cancelled)

10. (Cancelled)

11. (Cancelled)

12. (Cancelled)

13. (Currently Amended) The ~~vaccine~~ pharmaceutical composition of ~~any one of claims 10-12~~ claim 6, wherein ~~the composition is capable, upon~~ injection into a human of ~~an~~ a therapeutically effective amount of said composition ~~containing~~ comprising 25 μg of *E. coli* O157 O-specific polysaccharide~~, of inducing~~ produces in the serum of said human bactericidal activity against *E. coli* O157 such that the serum kills 50% or more of *E. coli* O157 at a serum dilution of 1300:1 or more.

14. (Currently Amended) The ~~vaccine~~ pharmaceutical composition of ~~any one of claims 10-12~~ claim 6, wherein ~~the composition is capable, upon~~ injection into a human of ~~an~~ a therapeutically effective amount of said composition ~~containing~~ comprising 25 μg of *E. coli* O157 O-specific polysaccharide~~, of inducing~~ produces in the serum of said human bactericidal activity against *E. coli* O157 such that the serum kills 50% or more of *E. coli* O157 at a serum dilution of 32,000:1or more.

15. (Currently Amended) The ~~vaccine~~ pharmaceutical composition of ~~any one of claims 10-12~~ claim 6, wherein ~~the composition is capable, upon~~ injection into a human of ~~an~~ a therapeutically effective amount of said composition ~~containing~~ comprising 25 μg of *E. coli* O157 O-specific polysaccharide~~, of inducing~~ produces in the serum of said human bactericidal activity against *E. coli* O157 such that the serum kills 50% or more of *E. coli* O157 at a serum dilution of 64,000:1 or more.

16. (Cancelled)

17. (Cancelled)

18. (Cancelled)

19. (Currently Amended) A method of inducing in a mammal serum antibodies that are bacteriostatic or bactericidal to *E. coli* O157, comprising administering to said mammal, in a physiologically acceptable carrier, a conjugate molecule of any one of claims [1-5] 1-3.

20. (Currently Amended) The method of claim [18] 19 wherein said conjugate molecule is administered at a dose of about 5 micrograms to about 50 micrograms of *E. coli* O157 O-specific polysaccharide.

21. (Currently Amended) The method of claim [18] 19 wherein the antibodies protect the mammal against infection by *E. coli* O157.

22. (Currently Amended) A composition comprising isolated human antibodies which are immunoreactive with *E. coli* O157 O-specific polysaccharide and with the B subunit of Shiga toxin 1 or the B subunit of Shiga toxin 2.

23. (Cancelled)

24. (Currently Amended) The composition of claim 22, wherein the composition is chosen from the group consisting of ~~mammalian~~ human plasma, ~~mammalian~~ human serum, and ~~mammalian~~ human ~~gamma globulin~~ immunoglobulin fraction.

25. (Cancelled)

26. (Cancelled)

27. (Currently Amended) A method of passively immunizing a human ~~mammal~~ against *E. coli* O157, comprising administering to said human ~~mammal~~ an immunologically sufficient amount of a composition according to ~~any one of claims 22-25~~ claim 22.

28. (Currently Amended) The method of claim 27 wherein the composition ~~antibody~~ is administered at a dose in the range of from about 1 mg/kg to about 10 mg/kg body weight of the human ~~mammal~~.

29. (Cancelled)

30. (Currently Amended) A method for vaccinating a mammal against *E. coli* O157 infection, comprising administering to the mammal ~~human~~ an immunizing amount of a pharmaceutical composition according to claim 6.

31. (Original) The method of claim 30 wherein the mammal is a human.

32. (Cancelled)

33. (Cancelled)

34. (Currently Amended) ~~A~~ The conjugate molecule of claim 1 ~~comprising an O-specific polysaccharide, covalently bound to the B subunit of Shiga toxin 1 or Shiga toxin 2, or to a non-toxic mutant Shiga holotoxin~~, wherein the O-specific polysaccharide is an O-specific polysaccharide of a bacterium chosen from the group consisting of: *E. coli* O157, *E. coli* O111, *E. coli* O17, and *E. coli* O26~~, and *Shigella dysenteriae*~~.

35. (Original) The conjugate molecule of claim 34 wherein the O-specific polysaccharide is covalently bound to the B subunit of Shiga toxin 1 by means of a dicarboxylic acid dihydrazide linker.

36. (Original) The conjugate molecule of claim 35 wherein the dicarboxylic acid dihydrazide is adipic acid dihydrazide.

37. (Cancelled)

38. (Cancelled)

39. (Currently Amended) A pharmaceutical composition comprising a conjugate molecule of any one of claims [34-37] 34-36 further comprising a pharmaceutically acceptable carrier.

40. (Cancelled)

41. (Cancelled)

42. (New) A pharmaceutical composition, comprising a therapeutically effective amount of the conjugate molecule of claim 1 in a pharmaceutically acceptable carrier.